

Army Objective Force

*“A force projection
Army that is decisive
across the
full spectrum
of conflict in the
21st Century”*

Headquarters

US Army Training and Doctrine Command

09 April 2001



Agenda

- Decisiveness
- Illustrative Scenario:
 - ✓ Operational Environment
 - ✓ National Command Authority (NCA) Guidance
 - ✓ Military Objectives
- Objective Force in future scenario:
 - ✓ Entry Operations
 - ✓ Decisive Operations
- Pursuit of Technology
- Summary

Purpose

Illustrate:

- Objective Force - essential to executing decisive Joint operations
- Challenges of emerging operational environments
- Significance of Army support to the CINC
- Key operational capabilities of the Objective Force

Define “*DECISIVENESS*”

- Ability to accomplish strategic goals and objectives
- Decision is achieved by:
 - ✓ The ability to force an enemy to succumb to *our* will and cease to resist
 - ✓ Physically destroying enemy's capability to fight
 - ✓ Breaking enemy's will by:
 - Inflicting more destruction and disintegration of control than the enemy can bear
 - Forcing capitulation to negotiate settlement

What Constitutes Decisiveness

- Operations other than war
 - ✓ Solidify partnerships / relationships
 - ✓ Enforce peace
 - ✓ Prevent crisis
- Smaller Scale Conflict / Crisis (SSC)
 - ✓ Re-establish regional stability, lasting peace
 - ✓ Halt genocide, end refugee flow
 - ✓ Eliminate threats to regimes
- Major Theater War (MTW)
 - ✓ Counter offensive to rapidly conclude conflict
 - ✓ Significant reduction of risk to US / Allied forces
 - ✓ Enable rapid swing between theaters if second conflict erupts

How Force Projection Army Brings Closure to Joint

Operations

- Supports CINC by establishing multi-dimensional area of influence
- Cements vital coalitions, helps stabilize governments
- Directly attacks enemy anti-access strategy
- Immediately alters crisis conditions

Despite significant challenges of time sensitivity, anti-access and a complex environment...

- Accomplishes decisive military action to achieve CINC / NCA stated objectives

Bottom line: Closure is assured and rapid

Illustrative Scenario

(2010)



- **Azerbaijan: Pro-Western President; Opposed by radical Islamic dissident faction supported by Iran**
- **Iran providing military support to Armenia to increase pressure on Azerbaijani government**
- **Armenia invades Azerbaijan to regain lost territory**
- **Islamic dissident faction demands resignation of Azerbaijani president**
- **Iran positions substantial military forces along the Azerbaijani border; postured towards Baku**
- **Russia proposes a joint US / Russian operation to halt Armenian aggression, restore previous border, and deter Iranian intervention in the crisis**



Operational Environment

- **NATO expansion in region**
- **Tension between Russia and Turkey**
- **Instability in Former Soviet Union states**
- **Religious/Ethnic fault lines**
- **Aggressive China**
- **Simmering India / Pakistan situation**
- **Islamic Fundamentalism**
- **International terrorist groups**
- **International corporate business**
- **Religious groups**
- **Nomadic non-aligned groups**



Operational Environment

- Failed states
- Ethnic hatred and genocide
- Imbalance of economic power and resource distribution
- Disillusioned emerging democracies
- Growing disenfranchised factions
- Increased internal criminal acts



Failed states
Fundamentalist
Movements

Terrorist &
Insurgent
Activity



Proliferation
of
Conventional
& Weapons of
Mass Destruction



All Factors Localized in the Caspian
Region

Jodhpur ©

US Strategic Interests in Caspian Region

2010

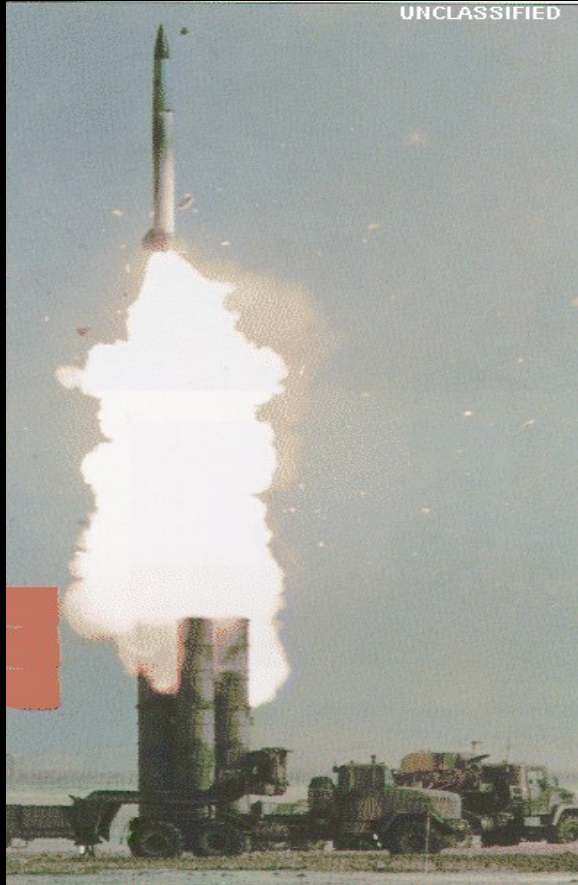
- Increased US & allied access / influence to:
 - ✓ Stabilize region
 - ✓ Preclude failed states / open hostilities along tribal, ethnic, & religious lines
 - ✓ Ensure balance of power in region
 - ✓ Promote good governance, free market economics, basic human rights
 - ✓ Promote adherence to rule of international law
- Preclude conflict escalation to hostilities
- US investment in energy resources

Potential Crises On Many Fronts:



- Regional actors take steps to wield influence in Caspian region
- External states drawn into potential

Conflict Patterns



- Long Range - High Altitude sophisticated Air Defense systems are dispersed and deployed in Armenia, Azerbaijan and Iran



- GPS and Electronic jammers deployed

- Mechanized and Armored units, supported by artillery and rockets attack rapidly from multiple directions



Conflict Patterns



- Special Purpose Forces target and take direct action against reserves, communications and airfields

- Infantry and Engineers establish ambush sites in complex terrain



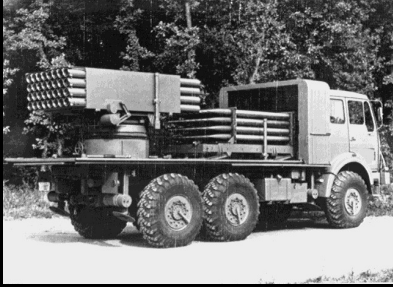
- SCUDs and Cruise Missiles are dispersed and camouflaged prepared to strike APODS and SPODS

Conflict Patterns

- Azeri refugees and POWs are positioned in camps around dispersed artillery and MRL batteries
- Local citizens are organized to report enemy troop movements and
- Armenian refugees in Turkey are encouraged to sabotage air bases
- Air Assault Infantry, guerrillas, positioned to strike supply lines and road networks



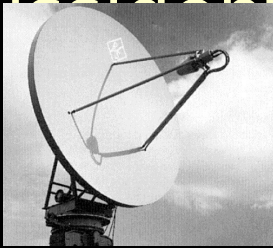
Conflict Patterns



- Iran positions MRL and long range artillery along the border.



- MANPADs, RPGs, mortars and explosives are smuggled to Islamic dissidents.



- Iranian television and radio station conduct Information Operations.

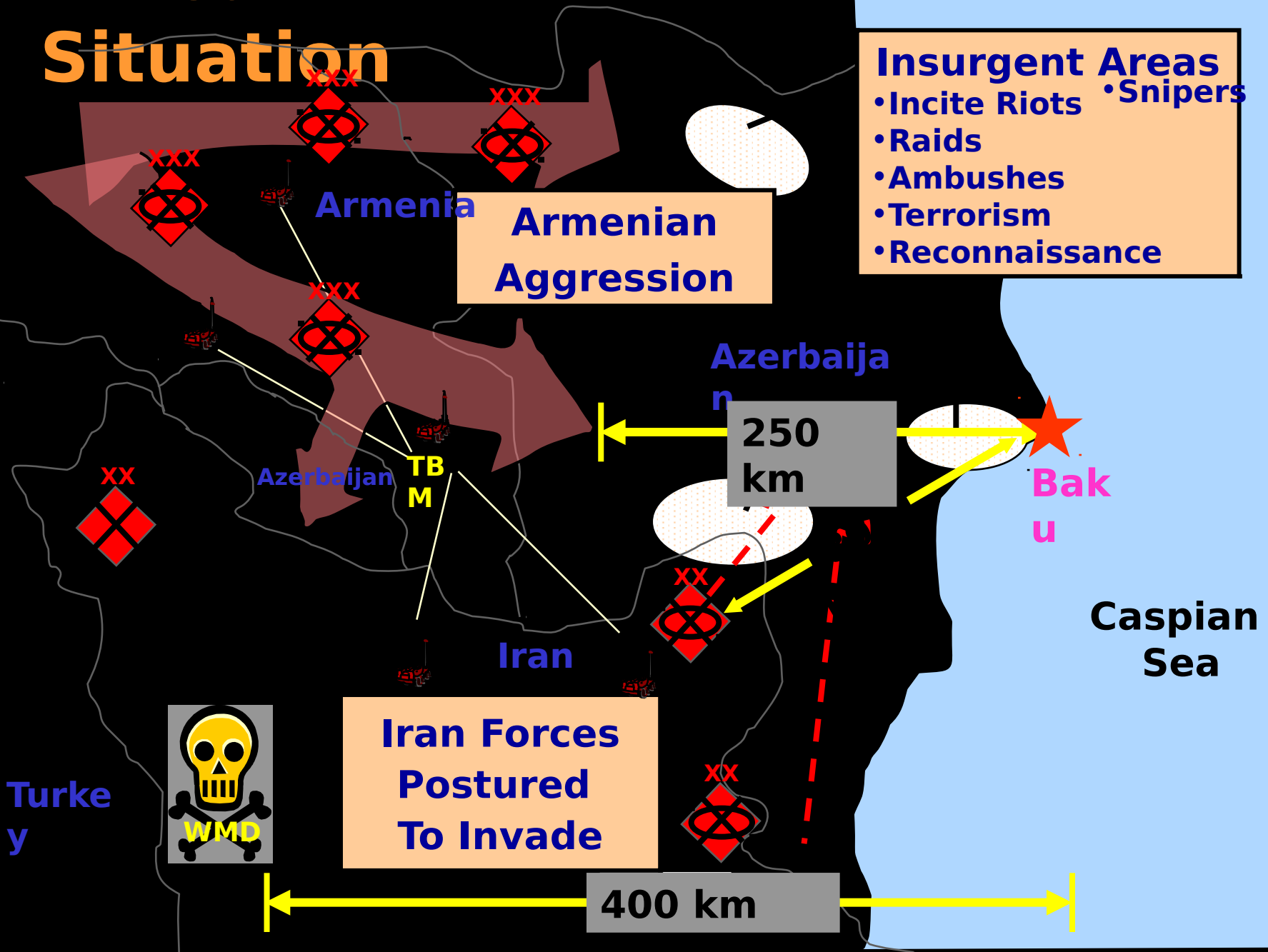
- Iran positions submarines in the Black Sea and along the

Dardanelles

Iran has Theater Ballistic Missiles and Weapons of Mass Destruction



Threat Situation



Challenge: Strengthening the Government of Azerbaijan

- Weakened Azerbaijani government in danger of collapse. If Azerbaijani government collapses...
 - ✓ Externally supported (Iran) radical Islamic faction will form new hostile government
 - ✓ Terrorism, civil unrest and civil war
 - ✓ Insurgents will attempt to control populace through mass media (radio, TV, papers); IO campaign

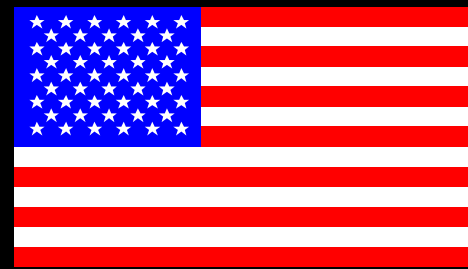
Challenge: Supporting the Azerbaijani Military

- Azerbaijani military rapidly losing its fight with Armenian forces
 - ✓ Azeri Military Forces require reinforcement or support to remain cohesive
- Armenia capable of conducting operations to limit, interrupt and deny access
 - ✓ Equipped with cruise missiles, SCUD ballistic missiles and long range precision multiple rocket launchers

Challenge: Decisive Preclusion

- Iranian forces are postured near the Azerbaijani border
 - ✓ Significant conventional ground forces: (3 Mechanized Divisions, and 2 Armored Divisions)
 - ✓ Sufficient strength to rapidly overwhelm Azeri forces and occupy Baku
 - ✓ Supported by ballistic missile and sophisticated air defense forces

National Command Authority Guidance



- Deploy US Force to separate belligerents
- Preclude intervention by regional aggressor militaries
- Expel invading forces
- Reestablish legitimate international boundaries
- Establish conditions for negotiated settlement and long-term International Observer Force
- Safeguard US force and interests in theater

Within Four Weeks: Stop continued aggression, and secure border areas

Within Eight - Twelve Weeks: Expel invading forces, re-establish legitimate international border, and prepare to defeat aggression by any regional military forces

CINC Challenges

**Bolster
Azerbaijani
Military**

**Control
Insurge
nt Areas**

**Suppo
rt
Azeri
Gov't**

Azerbaija
n

250
km

Bak
u

Azerbaijan

TB
M

Iran

Caspian
Sea

**Halt
Armenian
Advance**

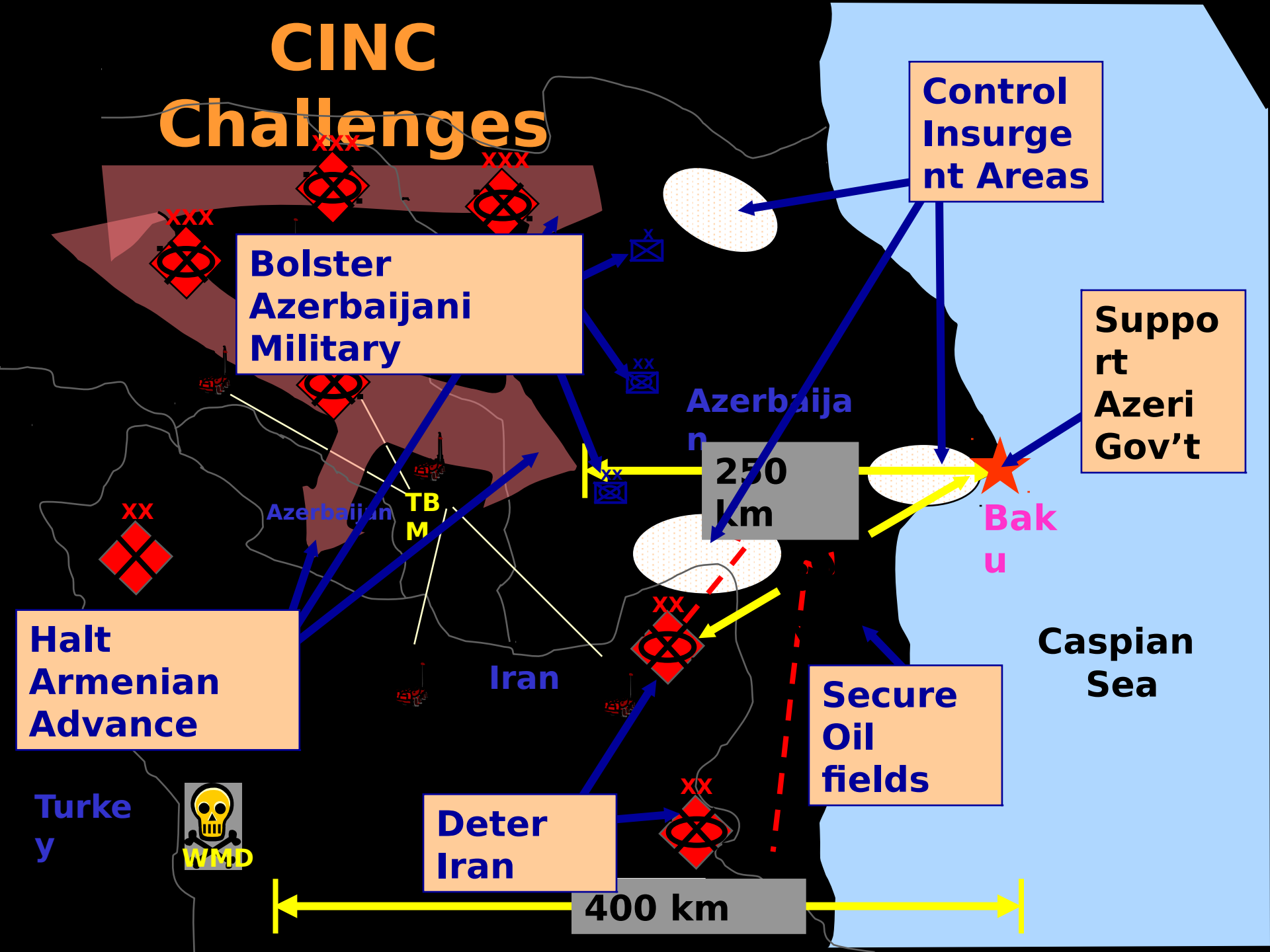
**Secure
Oil
fields**

Turke
y



**Deter
Iran**

400 km



CINC Military Objectives

- Stabilize Azerbaijani government, force insurgents out of capital city, quell unrest
- Deter or defeat Iranian forces. Prevent illegitimate occupation
- Halt Armenian forces
- Restore Azerbaijan / Armenia border
- Establish and maintain coalition

END STATE: Conflict resolution, legitimate Azerbaijani government in power, stable conditions to facilitate subsequent stability and support operations

CINC Intent

- Show US commitment from the outset
- Immediately engage the near term threat to Azeri sovereignty, which is the invading Armenian force
- Deter Iranian intervention by first demonstrating commitment to engage all forces that threaten an attack on Azerbaijan, its forces or people
- Support Azeri counter insurgency operations with intel, log, psychological and information operations, legal and police support
- Stabilize, then attack to destroy if Armenian forces won't leave Azeri soil
- Demonstrate intent by directing powerful strikes at key Armenian centers of gravity

Centers of Gravity (COG)

- Azerbaijani government: Primary COG, time sensitive*
 - Forward positioned Iranian forces: Time sensitive*
 - Armenian military forces: Time sensitive*
- * *Successful action against these COGs establishes the conditions that enable the following actions:***
- ✓ End Azerbaijan - Armenia hostilities
 - ✓ Stabilize regional balance of power

Army Objectives

- Stabilize Azerbaijani Government
- Form multi-national coalition
- Halt Armenian advance
- Eject Armenian forces
- Deter Iranian aggression
- Restore stability in Azerbaijan
- Be prepared to evacuate non-combatants

Problems in Foreseeable

Future

US Forces

Available

Time

**Lack of Theater
Infrastructure**

Distance Air & Naval Power cannot stop aggression in time

- No US Ground Forces forward deployed in theater. Have to deploy from:
 - ✓ CONUS
 - ✓ Central Europe
- Lack of mature infrastructure complicates access and sustainment
- The Joint Force can't get there from here... limited lift, air and sea ports, time sensitive

To do this...

Army forces have to be light enough to deploy rapidly, but mobile and lethal enough to be decisive

Forces will have to fight in different ways:

- ✓ Flexible doctrine
- ✓ Overmatching combat power from S & T
- ✓ Smaller but more capable, agile and versatile organizations against the most advanced threats
- ✓ Adaptive and adept leaders
- ✓ Innovative, professional soldiers
- ✓ Joint / Army integrated C4ISR as key enabler

TODAY'S FORMULA WILL NOT WORK!



Implication for the National Military Strategy

To achieve strategic success in the future, the Service and the Joint Force must apply different metrics to the force effectiveness equation.

The Objective Force is therefore centered on:

Changing the paradigms of Responsiveness, Deployability, Velocity, Agility, Survivability, Lethality, Sustainment - So that the Nation the Joint Force Commander will have...

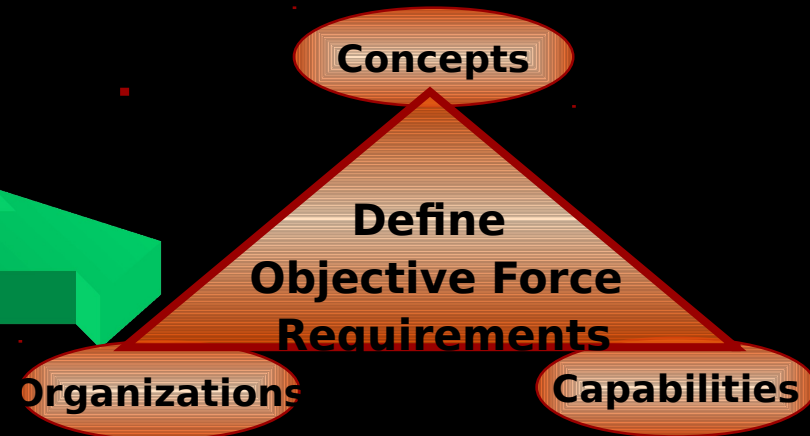
“A Force Projection Army that is decisive across the full spectrum of warfare in the 21st Century”

Assess Army Today / Tomorrow Against CONOPS

Critical Tasks

Challenges

Time
Environment
Threat
Friendly Forces



Failure at any critical task results
in failure to meet NCA and CINC guidance

Assessing Today's Force Against Future Dilemmas

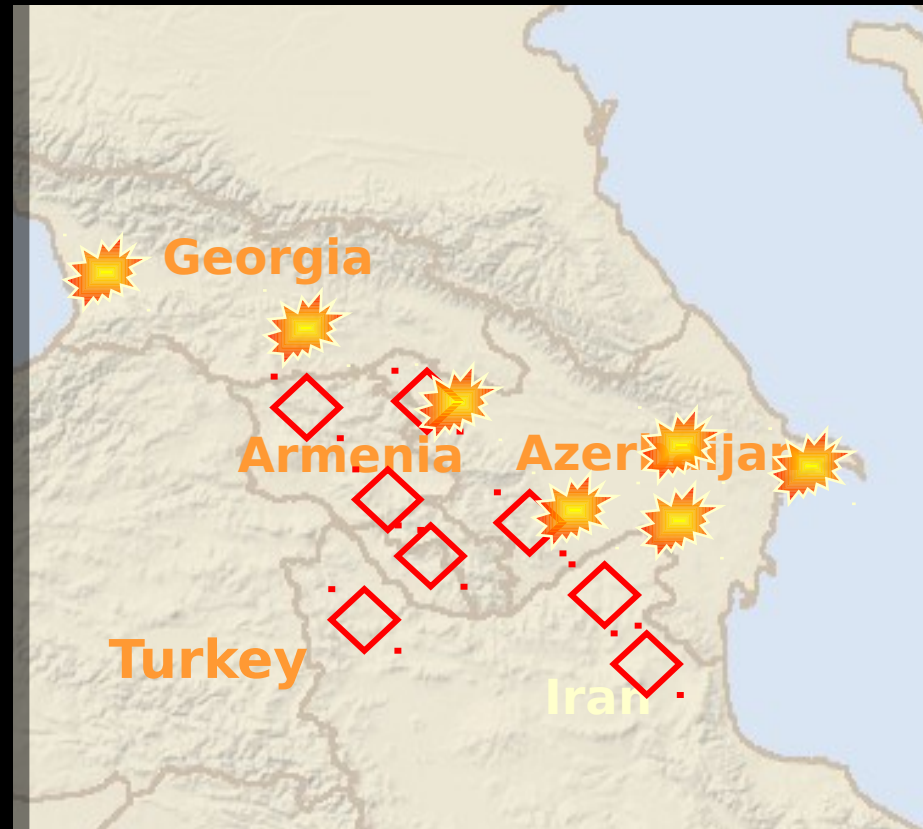
- **Power Projection**
- **Assured Access**
- **Entry Operations**
- **Decisive Operations**
- **Sustain**

Dilemma - Power Projection

Power Projection / Time

Task / Purpose: Rapidly deploy land forces into AOR to respond to crisis in

- order to:**
- resolve with immediate credible presence on the ground
 - Stabilize Azerbaijan government
 - Secure population, oil fields and entry points for follow-on forces
 - Establish Coalition Task Force
 - Support CINC strategy to deter Iranian aggression



Challenges to Power Projection

- Time sensitivity
- Environment:
 - ✓ Size of AOR, imposing geography, weather extremes
 - ✓ Diverse terrain – combination of open / rolling, urban, close and complex, mountainous
 - ✓ Austere infrastructure – class 40 roads and bridges, few developed air and sea ports, few options for combat service support
 - ✓ Limited host nation support – fuel, water, food



Challenges to Power Projection

- Four simultaneous enemy problems:
 - ✓ Regional anti-access strategy
 - ✓ In WEST, Armenian aggression (230km from Baku)
 - ✓ In SOUTH, Iran postured to invade (180 km from Baku)
 - ✓ At Baku, insurgent role is overthrow the government, invoke terror amongst population or damage the oil fields
- Coalition / Alliance:
 - ✓ Azeri military is struggling to halt Armenian attacks
 - ✓ Azerbaijan government on verge of collapse
 - ✓ Alliance vital interests not clearly threatened

Power Projection Concept - Today

TODAY

- ✓ Light DRB in 24-72 hours
- ✓ Light force lacks lethality, mobility, survivability and staying power
- ✓ Initially, information only by sensors
- ✓ Linear battlespace
- ✓ Secure Staging base

Strategic Lines of Communication (LOCs)

ISB

International Border

AOR

- ✓ Army Divisions tied to LOCs
- ✓ Extensive force build-up required
- ✓ 5-1/3 Divisions deploy in over 75 days
- ✓ Requires large staging bases
- ✓ Counter offensive forces **too** heavy, require mature

Require deep water ports & Army pre-positioned stocks

Power Projection Concept -

Tomorrow

TOMORROW

Less reliant on
Strategic Lines
of
Communication
(LOCs)

SB

How you enter with
speed and capability

Endstate

Get in rapidly with
credible combat power
that can deal with
challenges

CORE CAPABILITIES

- ✓ Tactical aircraft with strategic legs to carry soldiers and equipment
- ✓ Speed by air and sea
- ✓ Not reliant on sea and air ports
- ✓ By-pass anti-access to unimproved strips
- ✓ Credible air-ground Task Force in 120 hours. Can fight upon arrival
- ✓ Lethal, mobile, survivable force
- ✓ Self-sustaining for 3-7 days, then establish staging bases to sustain the force
- ✓ Entry / decisive operations blur
- ✓ Joint Logistics Over the

CONOPS - Very Tailorable /



BLACK
SEA

SEA PORT

AIR
STRIP

Army Aviation self-
deploys from Europe
(1200nm)



CASPIAN SEA

OBJ BDE
IN 96
HRS

OBJ DIV
IN 120
HRS

2 CORPS
HQ

5 DIV IN
30 DAYS

Today can't get
5 divisions and
2 corps in to do
these things

AIR
PORT

AIR
PORT

BAKU
SEA PORT

AIR
STRIP

AIR
STRIP

Turkey

**Tailorable to needs of
CINC**

Maneuver

Maneuver support:

- ✓ Recon, Surveillance, Target, Acquisition
- ✓ Joint Precision Strike
- ✓ Counter insurgency
- ✓ Army Aviation (Recon, Attack, Lift)
- ✓ Joint C3I
- ✓ Civil Affairs, MP Psyops

How Objective Force Deters

Objective: Impose will to deter aggression by Iran and stabilize region

How:

- Establish credible, multi-dimensional presence with a division in 120 hours and 5 divisions closing within 30 days
- Get dominant maneuver capability on the ground early on
- Aggressive reconnaissance, surveillance and target acquisition in depth integrated with joint sensor network
- Neutralize enemy capability with precision strike
- Wage information operations campaign to dissuade aggression

See, understand and act first to neutralize enemy capabilities while signaling US

Endstate

- ✓ Government stable
- ✓ Coalition with Russia, Azerbaijan, Georgia, Turkey
- ✓ Non combatant evacuation ongoing
- ✓ Baku and oil fields secure
- ✓ Sea and airports secure
- ✓ Initial Joint C3I Network in place
- ✓ Developing the situation

Airport



BAKU

SEA PORT

Patriot

Initial AOR

Oil Field

RSTA

RSTA

SPF

Special Purpose Forces

CASPIAN SEA

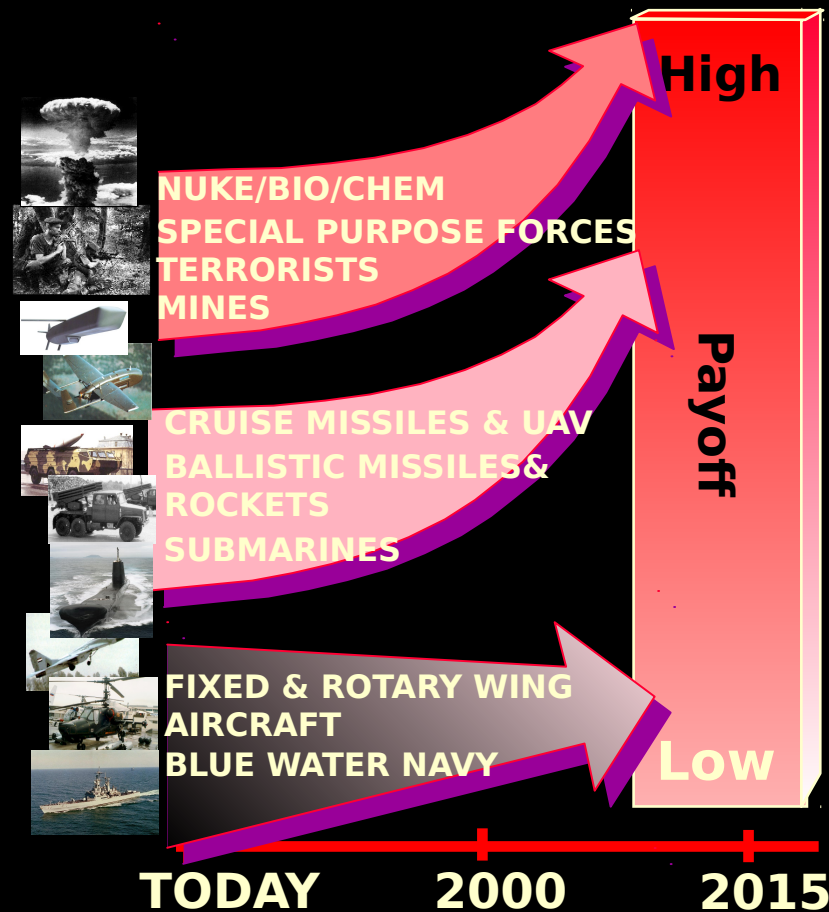
Dilemma - Assured Access

Growing Anti-Access

Threat

CHANGING THREAT

HOW IT'S CHANGING



Anti Access is becoming a significant Threat Operational

Maintain Threat of WME/D

Missile and long range fires on airfields and ports

Introduce SPF for intelligence and direct action against key facilities-airfields,ports and staging areas

Threaten strikes against neighboring states for allowing access

Leverage commercial world

Influence World Opinion

Attack Alliance &

Emerging Capabilities

NBC

SPF / Terrorists

TBM / Cruise / UAV

Air and Missile Defenses

Counter Precision & ISR

Submarines and Mines

Effective C4 & ISR

Information Operations

Characterized by Proliferation of Lower Cost Alternatives

Anti-Access Strategy

**Threaten
Neighbors for
Allowing Access**

**Anti-Access
Objective**

**Deny Objective
Force Entry at
Airfields and Sea
Ports**

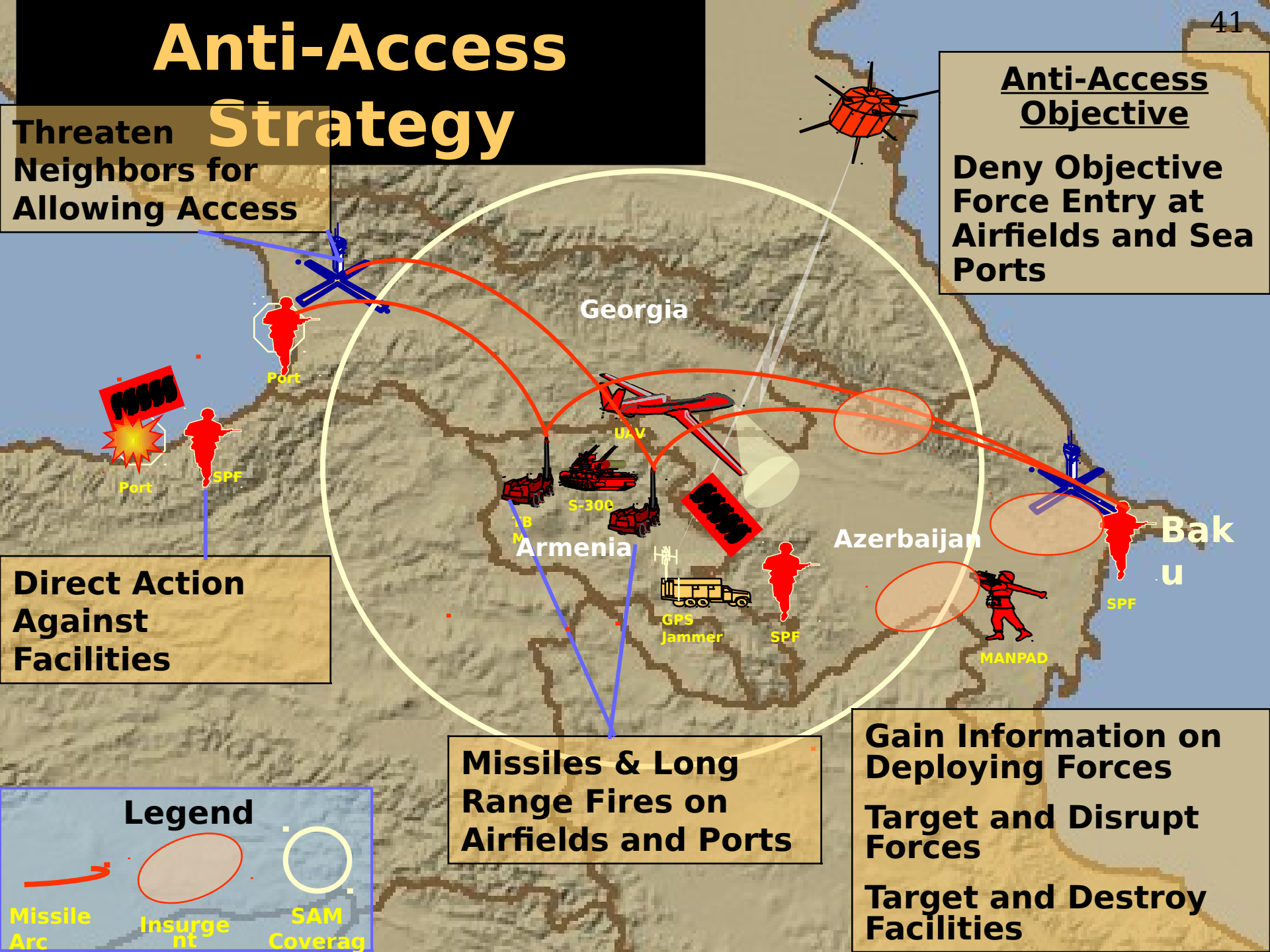
**Direct Action
Against
Facilities**

**Missiles & Long
Range Fires on
Airfields and Ports**

**Gain Information on
Deploying Forces**

**Target and Disrupt
Forces**

**Target and Destroy
Facilities**



Objective Force Assured Access

Concepts

- Avoid anti-access targeting strategy by:
 - ✓ Reducing reliance on airfields and ports. Airland first division Task Force
 - ✓ Conducting dispersed entry in unimproved area
 - ✓ Adjusting entry points en route to permissive and semi-permissive areas
 - ✓ Neutralizing air defense and missile attack at point of entry
- Rapid operational maneuver upon entry

Organizations

- Organizational autonomy at the lowest level
- Organic full-spectrum design
- Logistic and sustainment mobility
- Organic multi-dimensional intelligence, surveillance, and reconnaissance
- Embedded Special Forces coordination element for situational awareness and point of entry security

Define Objective Force Requirements

Capabilities

- En route remote control of ground and air sensors
- Tactical aircraft with strategic legs not dependent upon airfields that deliver a highly mobile force that can fight upon entry
- Localized short range missile defense
- Suppress short range air defense

Dilemma - Entry Operations

Entry Operations Task / Purpose

Rapidly stabilize AOR to set conditions for decisive operations:

- Expand lodgment to assure access / freedom of action
- Establish safe haven for Azeri government and populace
- Establish coalition land forces in Azerbaijan and Georgia to display US resolve and commitment
- Deter Iranian aggression
- Protect lodgments from TBM strikes

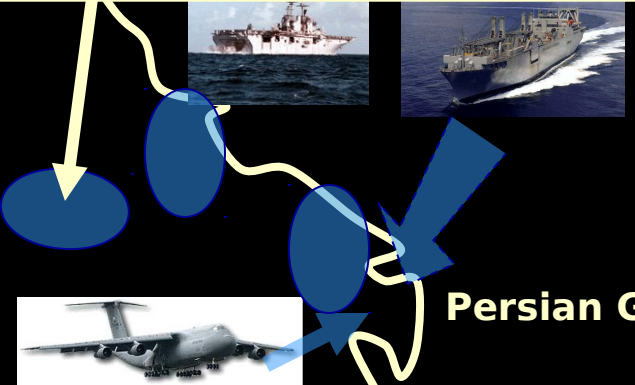
Entry Operations - Today - (Under Ideal Conditions)

- ✓ Linear battlespace
- ✓ Mature Infrastructure
- ✓ Secure Staging Base
- ✓ Contracting options for supplies
- ✓ Long standing coalition / alliance
- ✓ Over 75 days for 5+ Divisions

- Heavy forces
- ✓ Enormous logistics footprint
 - ✓ Reliant on PREPO stocks
 - ✓ Not easily deployable

Bottom line: Even with ideal conditions, which don't exist in the Caspian, we cannot get 5 divisions there in time to meet

Pure light Infantry
Lack lethality, mobility, survivability and staying power



- ✓ Deep water ports
- ✓ Time required for reception, staging, onward movement and integration into gaining commands

CONOPS Comparison -

General purpose forces for offense, defense, stability and support operations in any terrain required

- Establish coalition land forces
- Link up with Azeri forces
- **Dynamic defense with offensive capability** to stop aggression

AOR

- Employ credible baseline force
- Establish links to Joint sensors/ Comms
- Establish control of forces tailored to mission need
- **SASO in Baku**
- Secure air / **1** ports for follow-on forces

Insurgency

**1 Division
120 Hours**

Armenian aggression

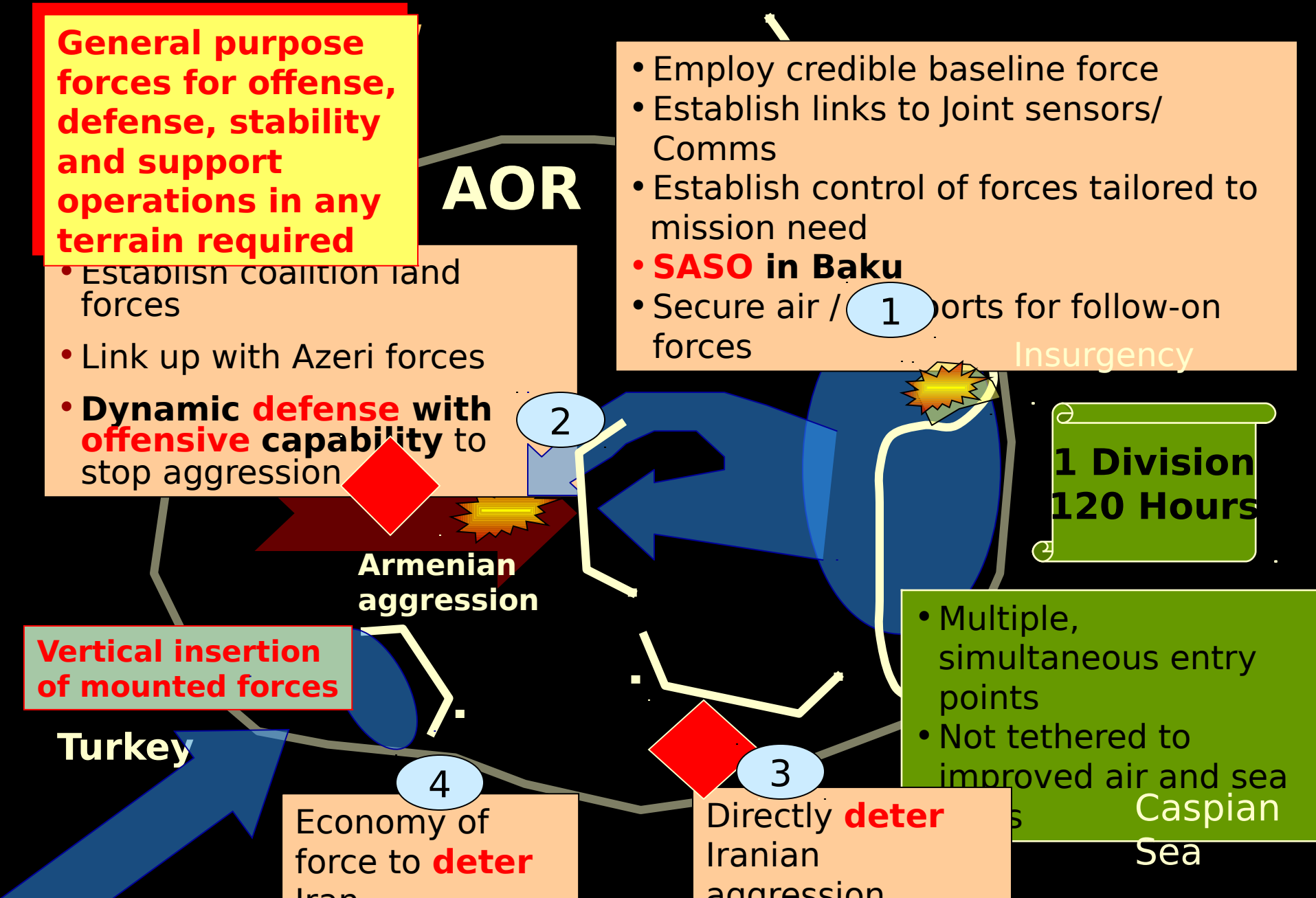
Vertical insertion of mounted forces

Turkey

4
Economy of force to **deter** Iran

3
Directly **deter** Iranian aggression

- Multiple, simultaneous entry points
 - Not tethered to improved air and sea
- Caspian Sea**



How Objective Force is Decisive in Stability and Support Operations

- Stabilize crisis in Azerbaijan and commence support operations under time sensitive pressures
- Deter aggression immediately
- Counter insurgency with effective internal defense program
- Demonstrate ability to protect population and oilfields
- Stabilize the government in Baku
- Gain confidence of population and international support
- Establish coalition land forces

Today - only uniquely-trained and task organized forces can accomplish
Tomorrow - any Objective Force unit can accomplish on call

Objective Force Entry Operations

Concepts

- Simultaneous operations
- Distributed operations
- Operational movement
- Dominant maneuver

Define
Objective Force
Requirements

Organizations

- Flexible organizations that can quickly tailor to mission needs
- General purpose forces with special purpose capabilities
- Combined arms air-ground Task Forces

Capabilities

- Precision strike
- Army long range fires to shape / shield the force
- Integrated sensors
- Army aviation (Recon / Attack / Lift)
- Vertical maneuver of mounted forces
- Theater Ballistic Missiles
- Mine / counter mine
- Counter-insurgency

Entry Operations Endstate

- Baku and oilfields secured
- Armenian advance contained and isolated
- Precision strike capability in place
- Iran deterred
- Azerbaijani government stabilized and in power
- Shielded, assured access for follow-on forces
- Coalition land forces established

Dilemma - Decisive Operations

Decisive Operations Dilemma

Define “*DECISIVENESS*”

- Ability to accomplish strategic goals and objectives
- Decision is achieved by:
 - ✓ The ability to force an enemy to succumb to *our* will and cease to resist
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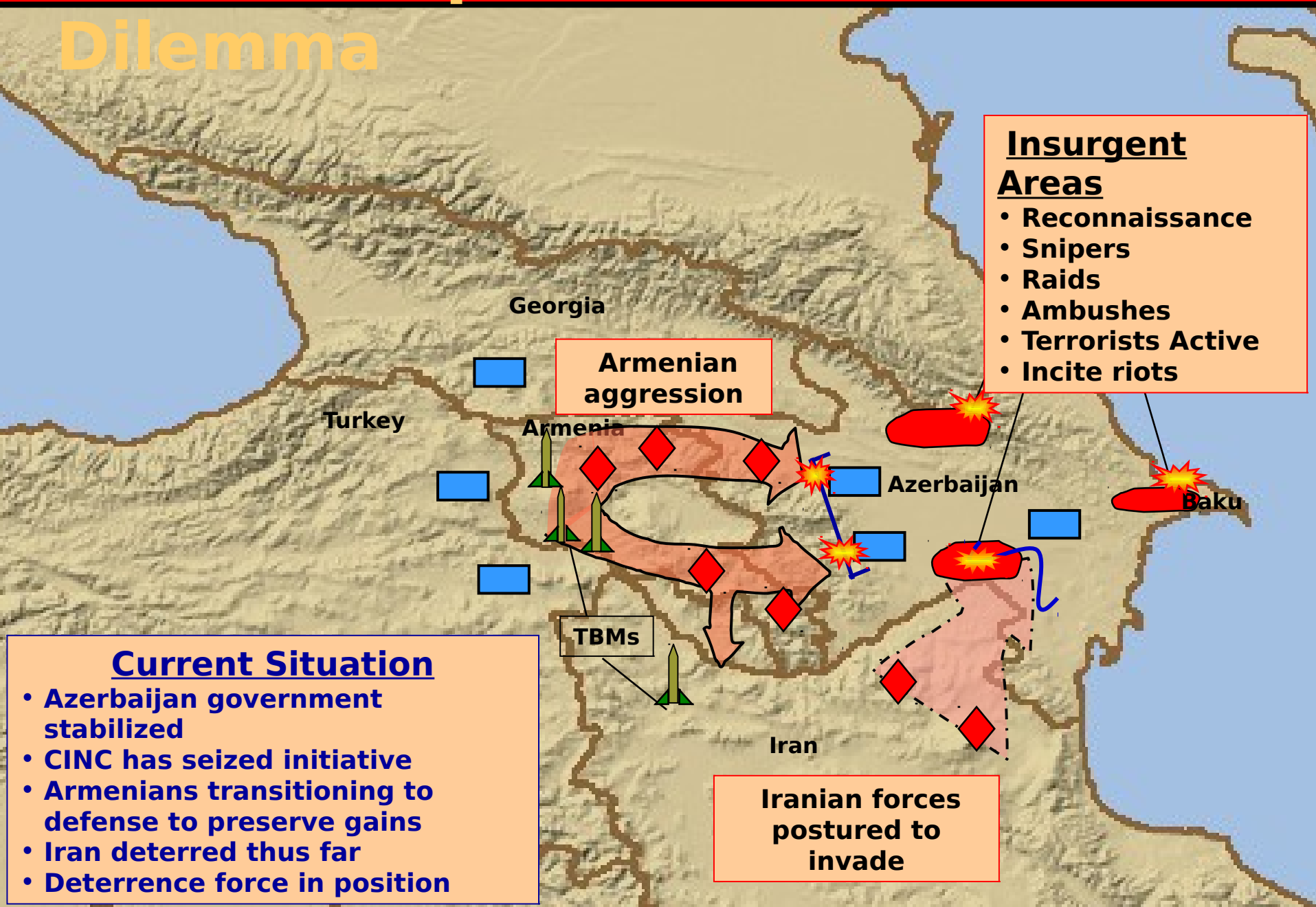
Decisive Operations:

Task / Purpose

- Conduct counter-offensive to repel Armenian forces
- Restore territorial sovereignty of Azerbaijan
- Eliminate counter-insurgency
- Resolve conflict in terms favorable for peace enforcement
- Destroy long range precision strike threat (deny sanctuary to Armenian forces)
- Respond to Iranian brinksmanship

Decisive Operations

Dilemma



Insurgent Areas

- Reconnaissance
- Snipers
- Raids
- Ambushes
- Terrorists Active
- Incite riots

Current Situation

- Azerbaijan government stabilized
- CINC has seized initiative
- Armenians transitioning to defense to preserve gains
- Iran deterred thus far
- Deterrence force in position

Iranian forces
postured to
invade

Decisive Operations

Why we can't do this today

- **Can't deploy 5 divisions through limited ports**
- **Can't logistically sustain**
- **Attacks on single axis**
- **Fighting units optimized for sequential operations:**
 - ✓ **Plan**
 - ✓ **Prepare**
 - ✓ **Attack**
 - ✓ **Pursue**
 - ✓ **Exploit**
 - ✓ **Plan**

- **Single axis**
- **Terrain & enemy call for light forces which lack combat power**

FORCE RATIO

1: 1.5

**TRADITIONAL BATTLE CALCULUS SAYS
WE NEED 3 OR 6: 1**

- **Cannot alter conditions**
- **Cannot enter w/ credible force**

**COUNTER
INSURGENCY**

CORPS
Boundary

**DETER
CONTAIN**

FORCE RATIO

1: 1.5

**DETER
CONTAIN**

Decisive Operations

For CINC to get closure, his force must simultaneously:

- **Attack on 2 fronts and be prepared to fight on 3rd**
 - ✓ Attack key Armenian forces and decisive points throughout area
 - ✓ Continue stabilizing capital area
 - ✓ Continue counterinsurgency operations
 - ✓ Have operational flexibility to counter Iranian intervention

Requires 2 Corps Task Forces

Corps TF HQ

Corps TF HQ

Turkey

Georgia

CORPS Boundary

Armenia

Azerbaijan

COUNTER INSURGENCY

Baku

Lodgment

TBMs

DETER CONTAIN

DETER CONTAIN

Iran

AGGREGATE FORCE RATIO

1: 1.5

TRADITIONAL BATTLE CALCULUS SAYS
WE NEED **3 OR 6: 1**

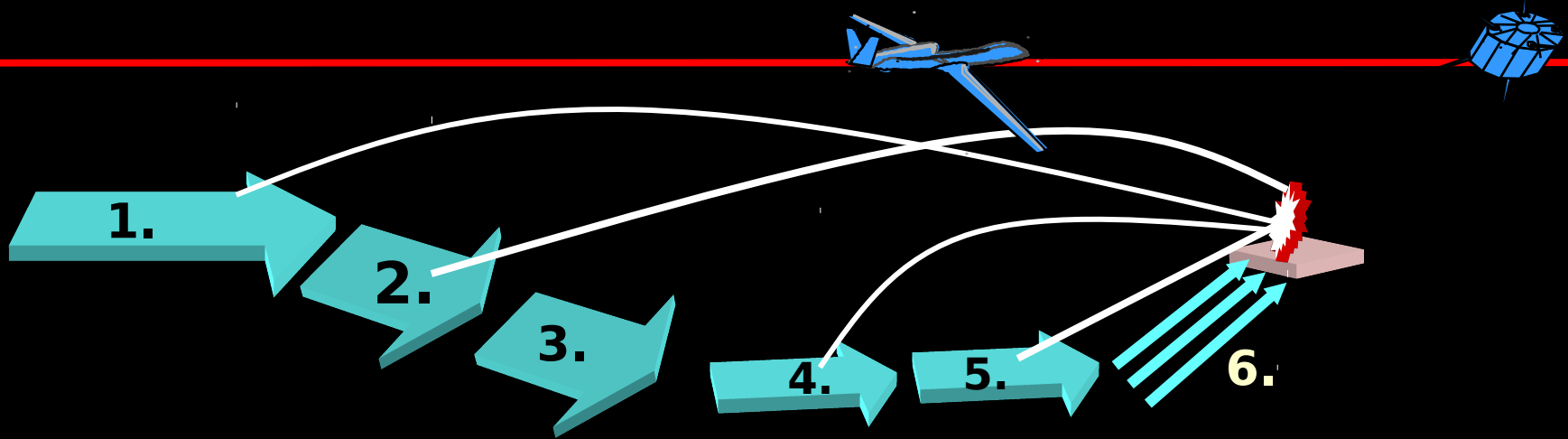
CORPS of 2001 CANNOT DO THIS

AGGREGATE FORCE RATIO

1: 1.5

Through shaping and Dominant Maneuver
generates up to **9:1** at point of decision

Dominant Maneuver



1. Develop situation out of contact at tactical standoff
2. Conduct fires on objective at tactical standoff
3. Maneuver to position of advantage out of contact
4. Combine maneuver and fires simultaneously employing tactical standoff. Isolate objective
5. Continue adjustment to changing situation during engagement seeking advantage through combined arms maneuver
6. Conduct tactical assault against enemy forces to finish tactical engagement

Why Corps And Divisions In The Objective Force



- **The Corps links ground forces and fight to joint assets and campaign**
- **Principal means for corps executing dominant maneuver in decisive operations**
 - ✓ Provides tactical direction to brigades
 - ✓ Provides access to Joint, long range fires and aviation fires
- **Principal Unit of Action**
 - ✓ Principal formation for closing with and destroying enemy
 - ✓ Habitually organized, cohesive teams

Dilemma - Sustainment

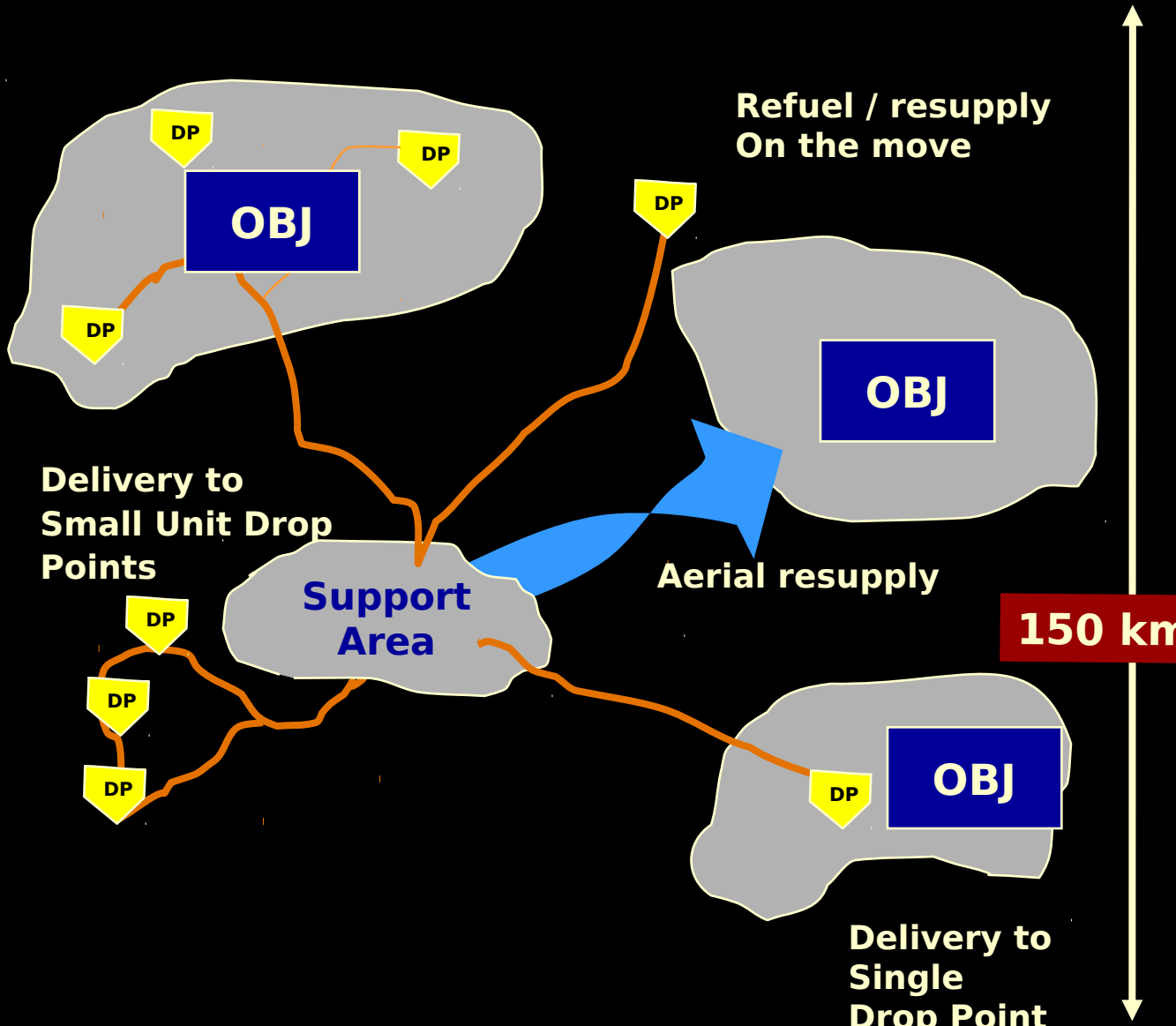
Dilemma - Sustainment

Task / Purpose: Build and sustain decisive combat power in austere, complex environment



Objective Force

← Sustainment → 150 km



- Non-contiguous expanded battlespace
- Vulnerable Lines of Communication
- Base clusters for security
- Situational awareness allows agile resupply

What's Different ?

TODAY

- Large stockage of repair parts (1235 Lines)
- Recovery: Dedicated assets
- Scheduled resupply at least daily
- Significant combat service support requirements
- Log Demand 528 Short Tons
- Log operations planning centric / reactive
- Commonality (# of major systems): 13+
- Ready-To-Fight: Requires RSOI

OBJECTIVE FORCE

- Less than 400 lines
- Self / Like vehicle recovery
- Every other day or as needed
- Limited combat service support requirements thru ultra-reliability, commonality, and fuel efficiency
- 180 short tons
- Execution centric / anticipatory
- Commonality (# of major systems): 5+
- Fights Off-the-Ramp: Minimal RSOI
- Reduce footprint by having things

Science and Technology

Objective Force Pursuit of Technology

Focus of Science and Technology Efforts:

- Survivability: Integrated approach and denial of shot opportunity to the enemy
- Lethality: Rapidly responsive and accurate effects with direct sensor to shooter links across an effects network (NET Fires)
- Power and Energy: Alternative and ultra efficient power sources and fuel usage – Includes multi-functional power for FCS, directed energy weapons, and soldier power systems (batteries)
- Responsiveness: Ability to deploy rapidly and support operations from austere forward areas
- Soldier and Leader: Improved training and cognitive intelligence tools. Enhance stamina and performance

Objective Force Pursuit of Technology

- Integrated Sensors: Sensor packages to provide all-seeing capability of enemy to enhance tactical standoff fires, maneuver and assault
- Communications: Reliable non-line-of-sight voice and digital communications. Includes requirement for full communications during aviation precision strikes
- Other Key Areas Include:
 - ✓ Extend tactical reach of fires
 - ✓ Mine / counter mine technology
 - ✓ Intra theater Air Mobile operations
 - ✓ Armed Unmanned Aerial Vehicle technologies and linkages between manned and unmanned platforms
 - ✓ Logistics demand reduction (ammo, fuel, repair parts, and consumption)

Pursuit of Technology - Lethality

Objective Force NET Fires in Support of Maneuver

- Instant clearance of fires
- Direct sensor to shooter linkage
- Enhanced BLUEFOR COP & increased lethality

A160 Robotic Helicopter

- 300 lb payload
- > 2500 NM Range
- 24 hour loiter time
- Integrated sensors / communications package



NET Fires

- Indirect fires capability
- Modular multi-mission precision munitions
- Platform interdependent Manned / unmanned

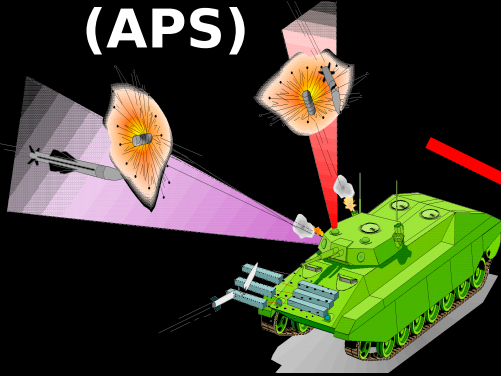
RF Tagging

- "Passive" location and status reports
- Reduced bandwidth requirement
- Reduced detectability
- No power requirement

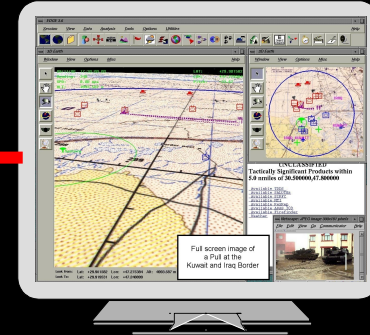
Responsive, accurate fires at tactical stand-off

Pursuit of Technology - Survivability

Active Protection System (APS)

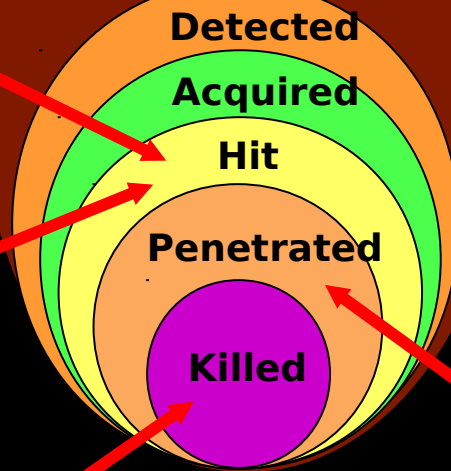


Kill The Enemy First
(See-Understand-Act - First)
And Don't Be ...



Situational Understanding

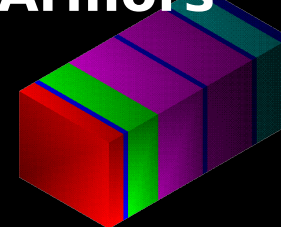
- ✓ See First
- ✓ Understand First
- ✓ Act First
- ✓ Finish Decisively



Robotics

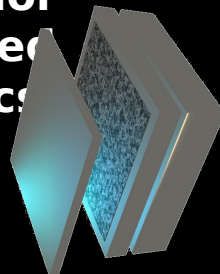


Advanced Armors

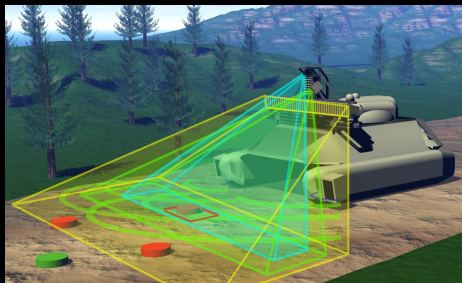
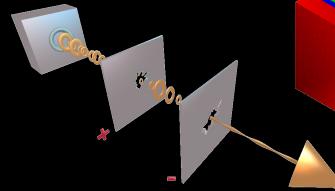


Smart Armor

- ✓ Sensor
- ✓ EM Armor
- ✓ Enhanced Ceramics

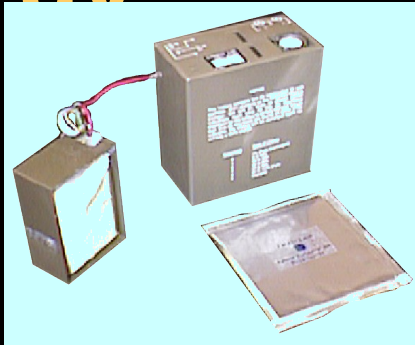


Electromagnetic Armor

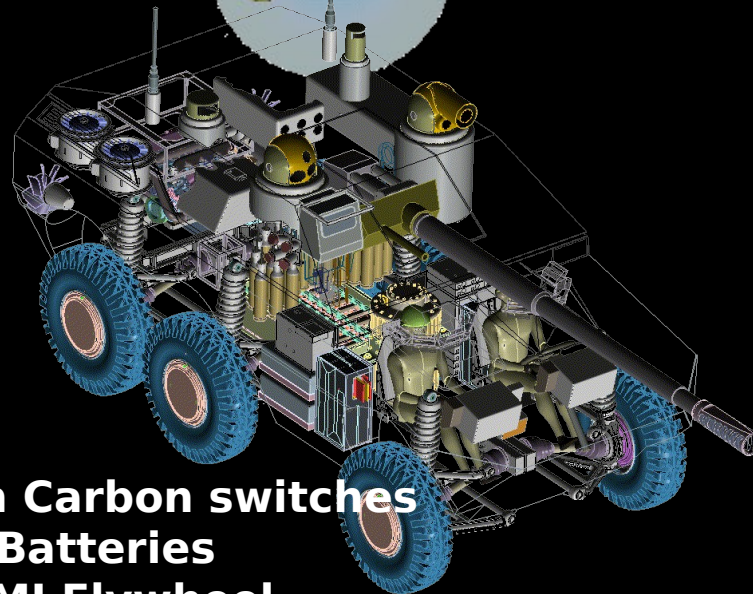


Mine Detection & Neutralization

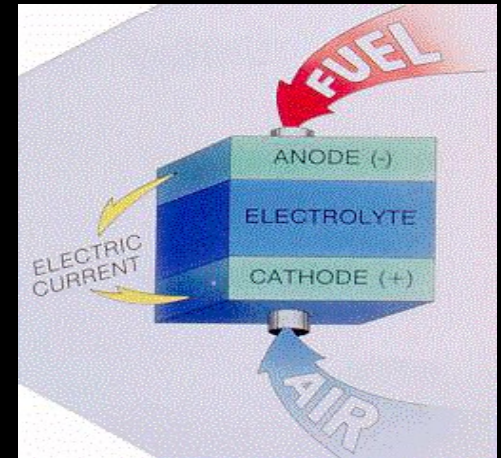
Pursuit of Technology - Power & Energy



**Lithium Ion / Polymer
High Energy Density
Zinc Air Packs**



**Silicon Carbon switches
Li Ion Batteries
Multi-MJ Flywheel
High Density Capacitors
High Power AC Induction Motors**



Fuel Cells



Pulse Power
✓ Capacitors
✓ Fly Wheels
✓ Inductors

Today's Technologies To Be Carried Forward To The Objective Force

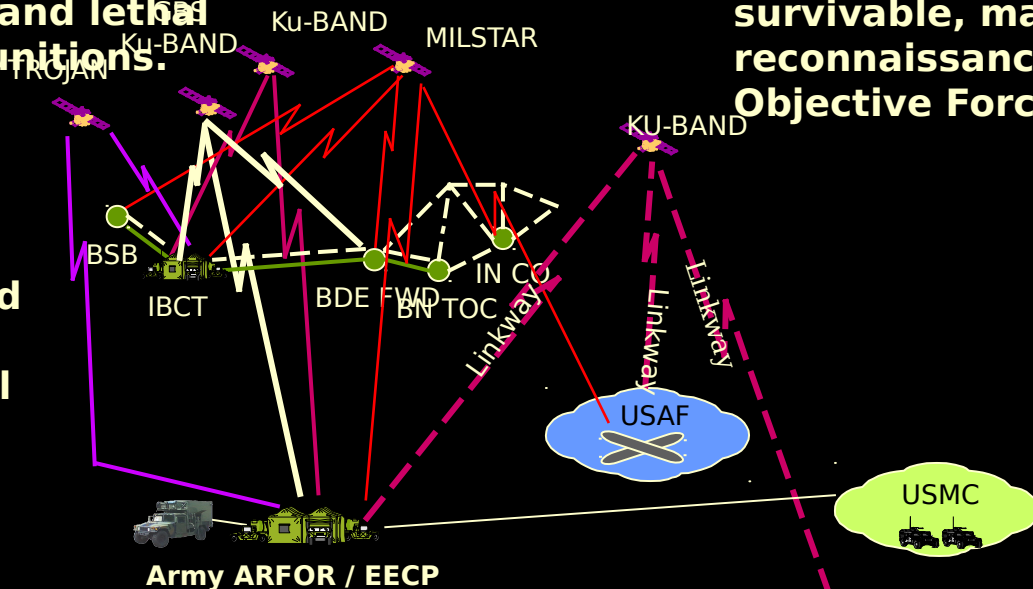


Raptor Intelligent Combat Outpost

Raptor will be comprised of acoustic overwatch sensors, an artificial intelligence platform (the gateway), and a ground control station, and lethal or non-lethal munitions.

WIN - T

The Warfighter Information Network - Tactical (WIN-T) is mobile, secure, survivable, and seamless C4ISR capable of supporting multimedia tactical information systems.



RAH-66 Comanche

Comanche provides lethal survivable, manned air reconnaissance for the Objective Force

Today's Technologies To Be Carried

Forward To The Objective Force

Shadow Tactical UAV



Shadow 200 TUAV will provide U S Army brigade commanders with crucial reconnaissance, surveillance, and battlefield damage intelligence — delivered efficiently from the air vehicle's electronic payload, directly to tactical command centers.



JTRS is a family of affordable, high-capacity tactical radios to provide both line-of-sight and beyond-line-of-sight C4I covering an operating spectrum from 2 to 2000 MHz. JTRS will be capable of transmitting voice, video and data. JTRS will not be one radio but rather a family of radios that are interoperable, affordable and scaleable.

Summary

Strategic Benefits of Objective Force

- Revolutionary step forward in achieving decisive US responsiveness
- Directly counters emerging anti-access threats and strategies
- Powerful force dominates across spectrum: Offense, Defense, Stability and Support.
- Greatly enhances US strategic agility—
 - ✓ Provides key to crisis response and deterrence
 - ✓ Decisive around the globe, deploys and fights anywhere
 - ✓ Demonstrates real commitment to allies and adversaries

Conclusion

- US must maintain global responsiveness to remain strategically dominant
- Current US power projection and decisive strategies heavily threatened by time, challenges to access, and changing environment
- Objective Force meets these challenges by giving CINCs ability to insert decisive ground power throughout Spectrum of Conflict
 - ✓ Entry Operations
 - ✓ Decisive Operations
- Objective Force solves dilemma of trading lethality & decisiveness for deployability and responsiveness
- Objective Force is essential, affordable, near-term transformation of US power projection